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September 21, 2011

By Email and U.S. Mail

Chris Ellison
Ellison Schneider & Harris, LLP
2600 Capitol Avenue, Suite 400
Sacramento, CA 95816
cte@eslawfirm.com

Re: In the Matter of Complaint Against Ormat Nevada, Inc. Brought By
California Unions for Reliable Energy, California Energy Commission
Docket No. 11-CAI-02

Dear Mr. Ellison:

Enclosed is the Response of California Unions for Reliable Energy to Ormat Nevada, Inc.'s Data Requests Sets 1 and 2. Please contact me if you have any questions regarding this matter.

Thank you,

/s/

Elizabeth Klebaner

EK:vs
Encl.

**CURE's Response to Ormat Nevada, Inc.'s Data Requests Sets 1 and Set 2
California Energy Commission Docket No. 11-CAI-02**

CURE's General Objection to Data Requests Set 1 and Set 2: The Commission regulation authorizing a party to obtain information from another party is provided in Section 1716(d). That section provides that "[a]ll such requests shall state the reasons for the request." Ormat Nevada, Inc. failed to provide any reasons for any of its requests in Set 1 and Set 2. Accordingly, CURE is not required to respond to any of the data requests from Ormat.

However, CURE provides its other objections and responses to each of the data requests as follows.

Request 1(a):

Please confirm whether David I. Marcus will be testifying to the generating capacity of the North Brawley Geothermal Development Project.

Response to Request 1(a):

The requested information is provided in CURE's Prehearing Conference Statement, dated September 12, 2011 and which was filed and served on the parties to this proceeding on that date.

Request 1(b):

If the answer to (a) is yes, please confirm whether David I. Marcus will provide testimony that the net generating capacity of the North Brawley Geothermal Development Project, as calculated pursuant to Section 2003, Title 20 of the California Code of Regulations, is 50 megawatts or above.

Response to Request 1(b):

Yes.

Request 1(c):

Please confirm whether David I. Marcus will be testifying to the generating capacity of the East Brawley Geothermal Development Project.

Response to Request 1(c):

The requested information is provided in CURE's Prehearing Conference Statement, dated September 12, 2011 and which was filed and served on the parties to this proceeding on that date.

Request 1(d):

If the answer to (c) is yes, please confirm whether David I. Marcus will provide testimony that the net generating capacity of the East Brawley Geothermal

Development Project, as calculated pursuant to Section 2003, Title 20 of the California Code of Regulations, is 50 megawatts or above.

Response to Request 1(d):

Yes.

Request 1(e):

If the answers to (a) and (c) are yes, please explain the basis for the testimony, and provide all documentation, materials, and resources relied upon to support the testimony.

Response to Request 1(e):

The request is cumulative and overbroad. The request also seeks information that is irrelevant and is not reasonably necessary to any decision on CURE's Verified Complaint and Request for Investigation. However, CURE responds as follows.

Please refer to CURE's Prehearing Conference Statement, dated September 12, 2011 and which was filed and served on the parties to this proceeding on that date.

The materials relied upon by David Marcus include the following documents:

CURE's proposed Exhibits 1-47, served on Ormat Nevada, Inc. on September 12, 2011;

Staff's proposed Exhibits 300-301, served on Ormat Nevada, Inc. on September 12, 2011;

Ormat Nevada Inc.'s proposed Exhibits 200-204;

Ormat Nevada Inc.'s Responses to CURE's Data Requests, Set 1 and Set 2, dated September 16, 2011;

Letter from Terrence O'Brien, Deputy Director of the California Energy Commission Siting, Transmission, and Environmental Protection Division to Charlene Wardlow, Ormat Nevada, Inc., dated August 15, 2011, regarding North Brawley Geothermal Project Generating Capacity; and

Letter from Terrence O'Brien, Deputy Director of the California Energy Commission Siting, Transmission, and Environmental Protection Division to Charlene Wardlow, Ormat Nevada, Inc., dated August 15, 2011, regarding East Brawley Geothermal Project Generating Capacity.

These materials are already in the possession of Ormat Nevada, Inc.

Request 1(f):

Please confirm whether David I. Marcus will be testifying to the respective plant loads of the North Brawley Geothermal Development Project and the East Brawley Geothermal Development Project.

Response to Request 1(f):

The requested information is provided in CURE's Prehearing Conference Statement, dated September 12, 2011 and which was filed and served on the parties to this proceeding on that date.

Request 1(g):

If the answer to (f) is yes, please explain the basis for the testimony, and provide all documentation, materials relied upon to support the testimony.

Response to Request 1(g):

The request is cumulative and overbroad. The request also seeks information that is irrelevant and is not reasonably necessary to any decision on CURE's Verified Complaint and Request for Investigation. However, CURE responds as follows.

Please refer to Response to Request 1(f).

Request 2(a):

If CURE intends to exercise this right and call a witness to testify in response to Ormat's responses to Staff regarding generating capacity, please identify each individual that CURE expects to present.

Response to Request 2(a):

Dr. Robert Koppe

Request 2(b):

With respect to each witness identified in response to (a), please provide a statement of their qualifications and identify the specific subject matter of their testimony.

Response to Request 2(b):

Dr. Koppe will testify on the topics of generation capacity, plant loads, and efficiency. A statement of Dr. Koppe's Qualifications and Experience is attached as Attachment 1.

Request 2(c):

With respect to any witness identified in response to (a), please confirm whether that witness will be testifying to the generating capacity of the North Brawley Geothermal Development Project.

Response to Request 2(c):

Yes.

Request 2(d):

If the answer to (c) is yes please confirm whether that witness will provide testimony that the net generating capacity of the North Brawley Geothermal Development Project, as calculated pursuant to Section 2003, Title 20 of the California Code of Regulations, is 50 megawatts or above.

Response to Request 2(d):

Yes.

Request 2(e):

With respect to any witness identified in response to (a), please confirm whether that witness will be testifying to the generating capacity of the East Brawley Geothermal Development Project.

Response to Request 2(e):

Yes.

Request 2(f):

If the answer to (e) is yes, please confirm whether that witness will provide testimony that the net generating capacity of the East Brawley Geothermal Development Project, as calculated pursuant to Section 2003, Title 20 of the California Code of Regulations, is 50 megawatts or above.

Response to Request 2(f):

Yes.

Request 2(g):

If the answers to (c) and (e) are yes, please explain the basis for the testimony, and provide all documentation, materials, and resources relied upon to support the testimony.

Response to Request 2(g):

CURE objects to this request. The request is cumulative and overbroad. The request also seeks information that is irrelevant and is not reasonably necessary to any decision on CURE's Verified Complaint and Request for Investigation. However, CURE responds as follows.

Dr. Koppe will rely on Ormat Nevada, Inc.'s proposed Exhibits 203 and 204 and the information exchanged by the parties at the workshop to be held on September 22, 2011.

Request 3(a):

Please provide a list of current members of CURE.

Response to Request 3(a):

CURE objects to this request. The request fails to state how the requested information is relevant to this proceeding, or why the requested information is reasonably necessary to any decision on CURE's Verified Complaint and Petition for Investigation.

The request seeks information that is protected from disclosure by the Constitution of the United States.

The request seeks information that is not reasonably necessary to any decision on CURE's Verified Complaint and Petition for Investigation.

Request 3(b):

Please confirm that these members have authorized CURE's participation in 11-CAI-02, and provide written documentation, if any, of this authorization.

Response to Request 3(b):

CURE objects to this request. The request fails to state how the requested information is relevant to this proceeding, or why the requested information is reasonably necessary to any decision on CURE's Verified Complaint and Petition for Investigation.

Although the information sought by this request is irrelevant, CURE responds as follows.

CURE's participation in 11-CAI-02 has been properly authorized.

Request 4(a):

Please provide a list of the members of CURE who live in Imperial County, and who have members who live in Imperial County.

Response to Request 4(a):

CURE objects to this request. The request seeks information that is protected from disclosure by the Constitution of the United States.

The request fails to state how the requested information is relevant to this proceeding, or why the requested information is reasonably necessary to any decision on CURE's Verified Complaint and Petition for Investigation.

Request 5(a):

Please explain in detail CURE's organizational structure, including but not limited to: whether there are elected or appointed positions of officers, such as a chairman or president, and explain the significance, authorities, and duties of each position or office.

Response to Request 5(a):

CURE objects to this request. The request fails to state how the requested information is relevant to this proceeding, or why the requested information is reasonably necessary to any decision on CURE's Verified Complaint and Petition for Investigation.

The information requested is not relevant to decision on CURE's Verified Complaint and Petition for Investigation.

However, CURE provides the following information. The unions participating in CURE include local unions affiliated with the International Brotherhood of Electrical Workers, AFL-CIO, the United Association of Journeymen and Apprentices of the Plumbing and Pipe Fitting Industry of the United States and Canada, AFL-CIO and the International Brotherhood of Boilermakers, Iron Ship Builders, Blacksmiths, Forgers and Helpers, AFL-CIO. CURE is chaired by Robert L. Balgenorth.

Request 5(b):

Please provide a copy of any documents that authorize CURE to represent its members in 11-CAI-02 including but not limited to: articles of incorporation, bylaws, a written charter, or a written agreement to form a coalition.

Response to Request 5(b):

CURE objects to this request. The request fails to state how the requested information is relevant to this proceeding, or why the requested information is reasonably necessary to any decision on CURE's Verified Complaint and Petition for Investigation.

CURE does not provide a response to this request because the requested information is not reasonably necessary to any decision on CURE's Verified Complaint and Petition for Investigation.

ATTACHMENT 1

QUALIFICATIONS AND EXPERIENCE OF

ROBERT H. KOPPE

EMPLOYMENT HISTORY

1968-1974 - Consolidated Edison Company of New York

For his first two years with Con Ed, Mr. Koppe was an engineer in the company's Nuclear Engineering Division. For the next four years, he was manager of that Division and was responsible for licensing, safety analysis and engineering for safety-related projects for Con Ed's five nuclear units. His responsibilities included design review and licensing for the Indian Point 2 and 3 turnkey units; design review of modifications and additions to the three Indian Point units; and modifications, analysis, and engineering support for the nuclear portions of the Indian Point 1 and 2 units during operation. He participated extensively in the design, safety analysis, and licensing for the proposed Verplank 1 and 2 BWR units.

1974-1994 S. M. Stoller/Hagler, Bailly, Boulder, CO

In 1974, Mr. Koppe was employed by the Power Division of the S. M. Stoller Corp., which was purchased by RCG/ Hagler, Bailly in 1989. During his 20 years with the Division, he was deeply involved in the following areas of:

- developing data bases for power plant performance and power plant equipment reliability,
- analyzing the performance of power plants and power plant equipment,
- developing power plant performance standards,
- reducing power plant operating costs, and
- auditing/reviewing power plant performance and costs.

He is the author of numerous reports on these subjects and has presented expert testimony on them before regulatory bodies in Maine, Massachusetts, New York, Pennsylvania, Delaware, Maryland, Virginia, North Carolina, Louisiana, Texas, Oklahoma, Wisconsin, Ohio and Ontario, and before several licensing boards of the Nuclear Regulatory Commission. He has also presented expert testimony in two civil suits.

1994-present, Koppe Consultants Inc., Boulder, CO

In 1994, Mr. Koppe left Hagler Bailly and formed his own consulting company. He has continued with the work he did at Hagler Bailly.

EDUCATION

- State University of New York, College of Forestry, BS, Wood Products Engineering, 1965.
- Ohio State University, MS, Nuclear Engineering, 1966.

In addition, Mr. Koppe completed all course work toward a Ph.D. in Nuclear Engineering at the Massachusetts Institute of Technology.

PROFESSIONAL EXPERIENCE

The following are some of the projects in which Mr. Koppe has had a major role, either as project manager or as a principal contributor. These projects all involved fossil-fired (primarily coal) power plants. Mr. Koppe worked on many other projects that involved nuclear power plants.

POWER PLANT PERFORMANCE TARGETS

- Studies to develop performance targets (Capacity Factor, Equivalent Availability Factor and Heat Rate) for many nuclear and fossil power units, including:
- nine fossil and four nuclear units owned by Atlantic Electric,
- eleven fossil and four nuclear units owned by Delmarva Power and Light,
- seven fossil units owned by Metropolitan Edison,
- seven fossil units owned by Philadelphia Electric,
- two fossil units and one nuclear unit owned by Southern California Edison,
- one nuclear and five fossil units owned by Rochester Gas and Electric,
- five fossil and four nuclear units owned by Virginia Power, and
- twelve fossil units owned by TransAlta (also included targets for O&M and capital additions costs).

AUDITS, REVIEWS AND STUDIES OF INDIVIDUAL UTILITIES, POWER PLANTS OR POWER PLANT OUTAGES

- An evaluation, for Virginia Power, of the performance of its five largest coal-fired units. The evaluation looked in detail at many recent or planned improvements in plant design and maintenance, and quantified the improvements in the performance of the units expected as a result.
- An evaluation, for Georgia Power, of its programs to improve the performance of its nuclear and fossil units, especially the Vogtle (nuclear) and Scherer (coal) units. The evaluation considered both design improvements and improvements in operations and maintenance, and quantified the costs and expected benefits of scores of improvements.

- An evaluation, for the Public Staff of the North Carolina Public Utilities Commission, of the life extension program proposed by Duke Power Company for eleven coal-fired units. The evaluation looked at the need for the life extension program, the improvements in the performance of the units expected to result from the program, and changes in program costs and plant outage times that might result if the program were carried out using schedules considerably different from the one proposed by Duke.
- An audit, for the New York Department of Public Service, of the availability and heat rate of Rochester G & E's one nuclear and five coal units. The audit included (1) comparison of RG&E's units with similar units in the industry, (2) evaluation of the management of the units and of various RG&E programs (such as maintenance, outage planning and plant modifications) as they affected availability and heat rate, (3) identification of programmatic or hardware changes that might improve availability or heat rate, and (4) prioritization of a number of proposed improvements based on cost-benefit evaluations of each improvement.
- An assessment, for the City of Cincinnati, of the costs that had been incurred to convert the Zimmer nuclear plant to coal, and a comparison of those costs to the anticipated costs of constructing a coal unit at a "greenfield" site. The "conversion" involved only a very modest use of equipment from the nuclear plant. The resulting plant is essentially a duplicate of the AEP design for 1300 Mw supercritical coal units.
- An assessment, for Houston Light and Power, of its proposed program for life extension of two older gas-fired units. These units had been mothballed and were being considered for refurbishment and life extension. The assessment focused on the scope of refurbishment that would be required and the performance (Equivalent Availability Factor) that could be expected from the units following that refurbishment.
- A study, for the California Department of Water Resources, of the expected capacity factor for a new coal-fired unit.
- An evaluation, for the Municipal Electric Association in Ontario, of Ontario Hydro's long term plans for its generating stations, which included 20 Candu-type nuclear plants and a number of coal-fired plants.
- Estimates, for an independent power producer, of the costs to build and operate a number of different power plants including a coal-fired plant, a combustion turbine plant and a combined cycle plant.
- Evaluations, for two different independent power producers, of the heat rates of their cogeneration facilities. The emphasis of these evaluations was the ability of the facilities to meet PURPA requirements for a QF.

- An evaluation, for Philadelphia Electric, of its coal plants at Eddystone and Cromby. The evaluation focused on performance changes to be expected as a result of new emissions control systems and many changes in plant design and operations.
- An assessment, for TransAlta (Alberta), of the expected performance and costs of its 12 coal power plants throughout their remaining lives. The assessment looked in detail at (1) historical performance and costs of the 12 units and of peer units throughout North America, (2) an assessment of the material condition of the plants done by an architect/engineer, and (3) review of expected modifications and upgrades of plant equipment throughout remaining life.

STUDIES OF INDUSTRY WIDE POWER PLANT EXPERIENCE

- An analysis, for EPRI, of data in the North American Electric Reliability Council's Generation Availability Data System (NERC-GADS) to determine the impacts of various problems on fossil plant performance as a function of design and operating characteristics. This study was to assist EPRI in R&D planning and was not published.
- A study, and a later update, for EPRI, of the performance of nuclear and large fossil generating units and of the causes of outages and deratings at those units. The studies looked in detail at:
 - how performance varied as a function of such factors as the size, age, and vintage of a unit;
 - the impacts of each plant system and component on plant availability;
 - the frequencies and duration of outages due to major problems; and
 - the effects of various design and operating conditions on the frequencies of problems.
- A study, for EPRI, covering the historical performance of fossil-fired units and the relationship of this performance to major unit characteristics such as size, age, vintage, fuel, steam pressure, etc. The study (based on analysis of NERC-GADS data) covered all units sized 200 Mw and larger over the period from 1965 through 1984. The analysis examined both unit and system/component performance. (EPRI Report CS-5627)

DEVELOPMENT OF POWER PLANT DATA BASES AND RELIABILITY IMPROVEMENT PROGRAMS

- Preparation of the Generating Availability Data System (GADS) reporting manual for the North American Electric Reliability Council. Presentation of a series of workshops to teach utility personnel responsible for data reporting how to use the new reporting system.
- A series of six studies, for EPRI, to determine how power plant reliability/availability data systems could be improved. Interviews were conducted with utilities, equipment suppliers, architect/engineers, government agencies and operators of existing data systems -- as well as many non-utility organizations -- to determine what data were being collected, the uses being made of that data and the most effective ways to collect and to use data.
- Development, for EPRI and NERC, of a series of detailed examples showing use of NERC GADS data in utility decision making (EPRI Report NP 2167).
- Presentation of workshops sponsored by the Electric Power Research Institute on basic techniques in availability engineering, emphasizing use of NERC-GADS data. (EPRI Report NP-2166)

POWER PLANT ENFORCEMENT CASES

During the past 11 years, Mr. Koppe has prepared expert testimony in about 20 cases involving coal-fired generating units. In each case, Mr. Koppe evaluated one or more of the following issues as applied to one or more electric generating units:

- The extent to which upgrades to the units should have been expected to increase the availabilities of those units;
- The extent to which increases in the availabilities of the units should have been expected to cause an increase in the amount of electricity generated by those units;
- The extent to which upgrades to the units should have been expected to change the thermal efficiencies (heat rates) of the units; and
- Whether or not upgrades to the units should be considered to have been “routine maintenance, repair, or replacement”.

DECLARATION OF SERVICE

I, Valerie Stevenson, declare that on, September 21, 2011, I served and filed copies of the attached **RESPONSES OF CALIFORNIA UNIONS FOR RELIABLE ENERGY TO ORMAT NEVADA, INC.'S DATA REQUESTS, SET ONE AND TWO**, dated September 21, 2011. The original document, filed with the Docket Unit or the Chief Counsel, as required by the applicable regulation, is accompanied by a copy of the most recent Proof of Service list, located on the web page for this project at:

<http://www.energy.ca.gov/proceedings/11-cai-02/index.html>.

The document has been sent to the other parties in this proceeding (as shown on the Proof of Service list) and to the Commission's Docket Unit or Chief Counsel, as appropriate, in the following manner:

(Check all that Apply)

For service to all other parties:

- √ Served electronically to all e-mail addresses on the Proof of Service list;
- √ Served by delivering on this date, either personally, or for mailing with the U.S. Postal Service with firstclass postage thereon fully prepaid, to the name and address of the person served, for mailing that same day in the ordinary course of business; that the envelope was sealed and placed for collection and mailing on that date to those addresses **NOT** marked "email service preferred."

AND

For filing with the Docket Unit at the Energy Commission:

- √ by sending an original paper copy and one electronic copy, mailed with the U.S. Postal Service with first class postage thereon fully prepaid and e-mailed respectively, to the address below (preferred method);

OR

by depositing an original and 12 paper copies in the mail with the U.S. Postal Service with first class postage thereon fully prepaid, as follows:

CALIFORNIA ENERGY COMMISSION – DOCKET UNIT

Attn: Docket No. 11-CAI-02

1516 Ninth Street, MS-4

Sacramento, CA 95814-5512

docket@energy.state.ca.us

OR, if filing a Petition for Reconsideration of Decision or Order pursuant to Title 20, § 1720:

Served by delivering on this date one electronic copy by e-mail, and an original paper copy to the Chief Counsel at the following address, either personally, or for mailing with the U.S. Postal Service with first class postage thereon fully prepaid:

California Energy Commission
Michael J. Levy, Chief Counsel
1516 Ninth Street MS-14
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mlevy@energy.state.ca.us

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct, that I am employed in the county where this mailing occurred, and that I am over the age of 18 years and not a party to the proceeding.

/s/
Valerie Stevenson



**BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT
COMMISSION OF THE STATE OF CALIFORNIA
1516 NINTH STREET, SACRAMENTO, CA 95814
1-800-822-6228 – WWW.ENERGY.CA.GOV**

***IN THE MATTER OF COMPLAINT AGAINST
ORMAT NEVADA, INC. BROUGHT BY
CALIFORNIA UNIONS FOR RELIABLE ENERGY***

**Docket No. 11-CAI-02
(Revised 9/12/11)**

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